ENVIRONME



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Freshwater Jellyfish in New Hampshire They do exist!

Have you ever seen a freshwater jellyfish? Are you aware they exist? Very few of us have been lucky enough to catch a glimpse of the freshwater jellyfish. They are infrequently found in lakes and ponds throughout New Hampshire. Let us explain a little about them.

What are freshwater jellyfish?

Craspedacusta sowerbii (freshwater jellyfish) was noted for the first time in England in 1880. It was first discovered in the United States in 1908 and has been reported in many of the contiguous 48 states. Typically, this creature appears in small ponds, however, there are conflicting reports stating in what types of waterbodies they are most commonly discovered. Some literature says they are found in old quarries, while other literature indicates that they thrive in new reservoirs. Wherever they are found, many scientists agree they are elusive.

In its polyp form, the jellyfish is less than 2-millimeters long. It is often unnoticed by the naked eye, mostly because it resides in the mucky bottom of a pond. As the polyp creeps along the substrate, it eats tiny invertebrates like zooplankton. The polyps can reproduce by asexual reproduction. Small buds are produced and, before too long, the adult jellyfish are found floating freely in the water. The freshwater jellyfish can also reproduce sexually, although the populations are rarely of mixed sexes. For the most part, all male or all female



A colony of three polyps

congregations have been observed. Sexual reproduction has been reported through controlled scientific experiments within a laboratory environment.



Three medusae

The freshwater jellyfish medusa is about the size of a quarter. It is translucent, but may appear white or green. Its sex organs, which hang from the center of the bell, make the jellyfish more visible. The tentacles around the bell are used to capture prey. Due to their small size, they are not harmful to humans; only small fish and invertebrates are susceptible to their stings. In this stage, the creature may be visible for only a few months in the summer time, usually from July to October. It seems they prefer the warmer waters that late summer has to offer.

Don't count on seeing them in the same pond two years in a row; they may appear again in a few years or not at all! This is one aspect that has made researching the freshwater jellyfish so difficult.

Where have freshwater jellyfish been found in New Hampshire?

Below is a list of waterbodies where sightings have occurred and were reported to the New Hampshire Department of Environmental Services:

Angle Pond, Sandown

Big Island Pond, Derry

Crystal Lake, Manchester

French Pond, Henniker

French Pond, Henniker

Frost Pond, Jaffrey Harrisville Pond, Harrisville

Harvey Lake, Northwood Knights Pond, Alton

Lake Massabesic, Amherst
Lake Massabesic, Amherst
Lake Massabesic, Amherst
Mirror Lake, Tuftonboro
Lake Naticook, Merrimack
Province Lake, Effingham
Purity Lake, Madison
Squam Lake, Holderness
Stone Pond, Marlboro

Turtletown Pond, Concord White Oak Pond, Holderness

If you observe one of these creatures in your lake or pond, please let us know. We are always looking to extend our list of waterbodies with known populations of jellyfish. Please e-mail the information about your sighting (include the lake/pond name, town, date, plus any other pertinent information) to: acarlson@des.state.nh.us, or call (603) 271-0698.

The biology students at Indiana University of Pennsylvania, under the supervision of Dr. Terry Peard, are conducting research on freshwater jellyfish. To find more information about these mysterious creatures, check out their website at:

http://nsm1.nsm.iup.edu/tpeard/jellyfish.html
. They have many pages of information and links to other researchers throughout the globe. The photos used in this document are courtesy of their research.